

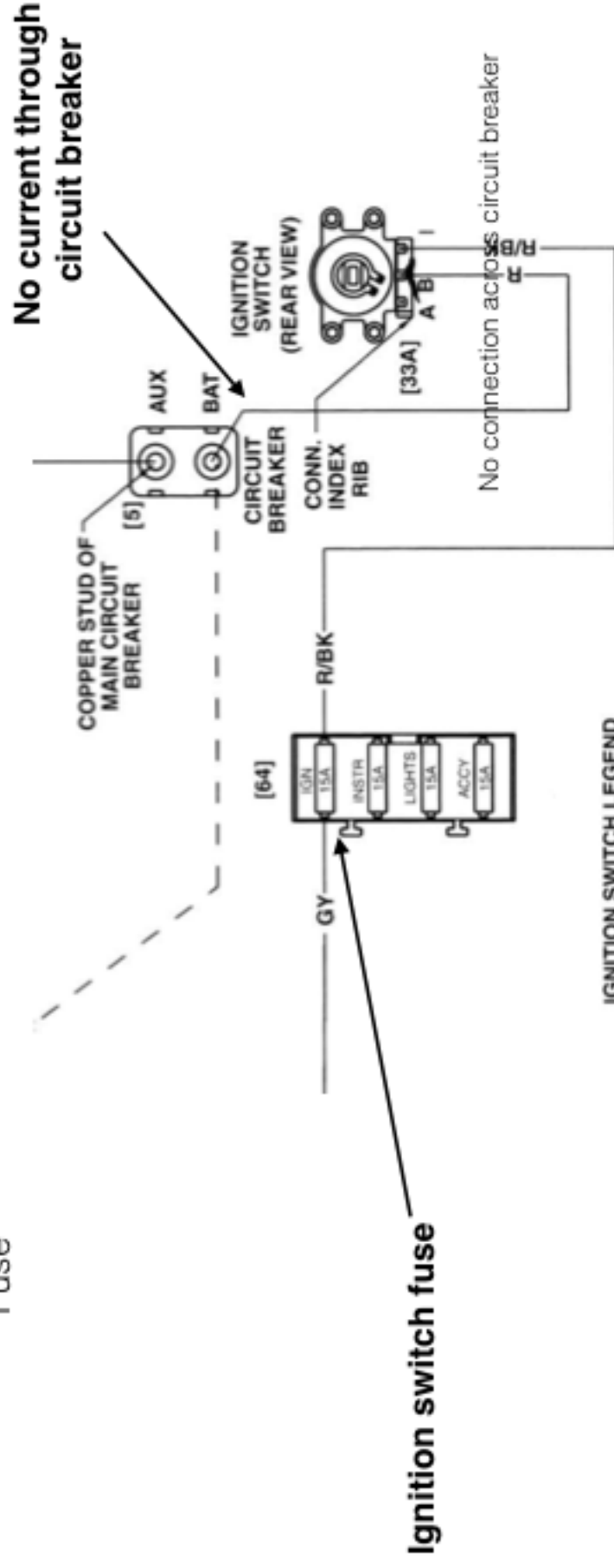
Harley-Davidson Motor Company, Inc. has decided that a defect which relates to motor vehicle safety, exists in certain 2001-2003 Model Year FL Touring and Police model motorcycles, including FLHPI, FLHTPI, FLHPEI, FLHTCI, FLHTCUI and FLTRSEI-2. These motorcycles have a condition whereby the 40 Amp. main circuit breaker could open due to reasons other than for which it was designed, causing an unexpected interruption of all electrical power to the motorcycle. This condition could cause a "quit while riding" situation, which could occur without warning and ultimately lead to a crash, thereby presenting a risk of death or injury to the rider.

Harley Davidson's 1998 Service Manual

Exhibit #88

page 8-1

Ignition Switch
Fuse



IGNITION SWITCH LEGEND

POSITION	A RED/ GREY	I RED/ BLACK	B RED
ACCESSORY	•		•
LOCK		•	•
IGNITION			•

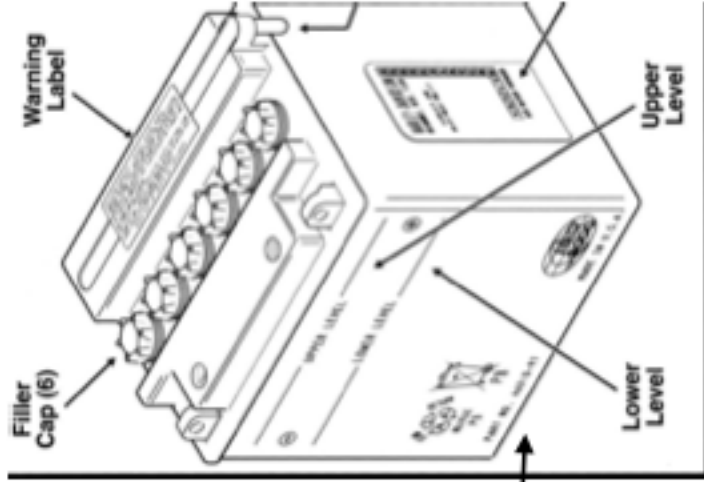
BATTERY IN SMALLEY TEST

Exhibit "FF" picture #10:



Original battery number

Exhibit #1 Service Manual page 8-57



Original battery number

Exhibit "OO" page #13

Customer: 2693
SMALLEY, DAVID H
95 UNDERWOOD AVE
HILTON, NY 14468
Phone: (716)392-3988
Fax: (800)000-0000
R.O. No:
Comments: 10,000 MI SERV

W.O. Number: 17492
Appointment: 8/08/2002 1:47PM
Offered Back: 8/8/02 2:07PM
Year: 1999
Mfg: HD
Model: FLHTC-U
VIN: 1HD1FCW18X1605608
Color: Unknown Color
Ref. No.:

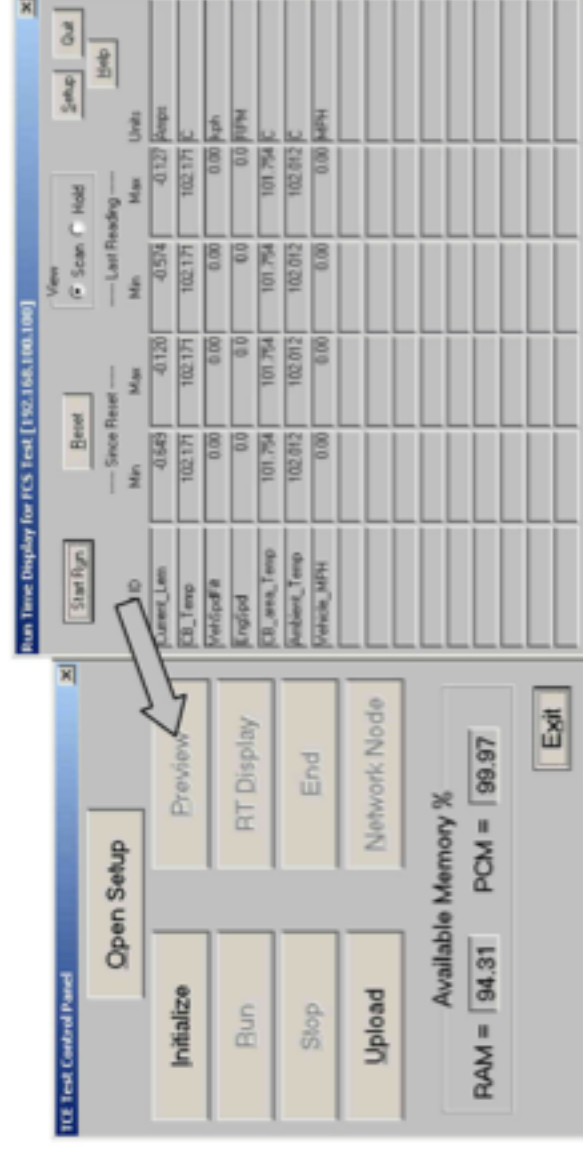
Appointment Date

Item Number / Job Code	Item Description / Labor Description	Delivered Quantity / Hours	Price Each / Hourly Rate	Extended Amount
Event Number: 1 Description: 10000 MI				
2050QIT	BULK 55 GALLON DRUM OIL	4.00	3.25	13.00
32317-45A	SPARK PLUG, BR12, 2 PACK	2.00	5.00	10.00
63758-99	OIL FILTER, CHROME, PREMI	1.00	11.95	11.95
66010-87	BATTERY, 30AH	1.00	94.95	94.95

Harley Davidson's Directions To Start Smalley Test

Mr. Hejlik: *"These instructions on how to covert the data that was collected I got from the electrical engineering department. They put it in a form of set of instructions with demonstrative showing exactly what needs to be done so I wouldn't make a mistake."*

Note: Thermocouples should read ambient temperature, Current should read approx. 20Amps, and the engine speed should read approx. 1500RPM.



Defendant's
Exhibit "EE" page 31

Exhibit #1
page 8-48

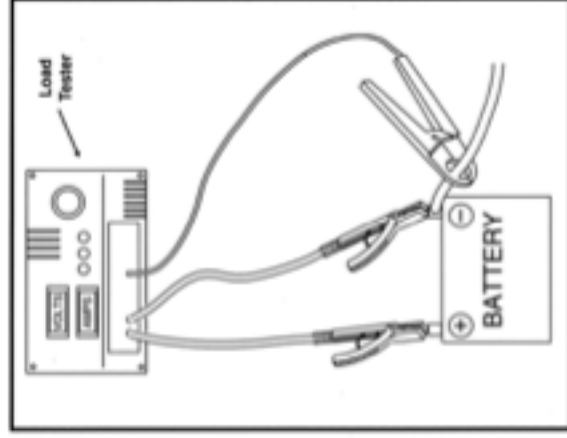


Figure 8-38. Check Current Draw (Ignition Switch On)

With ignition and all continuously running lights and accessories turned on (headlamp on high beam), read the total current draw. Compare this reading to the reading obtained in CURRENT OUTPUT TEST. The current output should

exceed current draw by 3.5 amps, minimum. If not, there may be too many accessories for the charging system to handle. Reconnect regulator when test is complete.

NOTE

Rider's habits may require output test at lower RPM.

Current and Voltage Output Test

1. Connect load tester negative and positive leads to battery terminals and place load tester induction pickup over positive regulator cable as shown in Figure 8-41.
2. Run the engine at 3000 rpm and increase the load as required to obtain a constant 13.0 volts.

See Figure 8-40. The current output should be as follows. Make note of the measurement.

ELHBL, ELHRCGL, ELHLC, ELHTC, ELTR	
38 amp (Low Output)	34-40 amperes
ELHTCGL, ELHTCGLL, ELTRJ	
45 amp (High Output)	41-48 amperes

Voltage Output Test

See Figure 8-41. After removing the load, read the load tester voltage meter. Voltage to the battery must be less than 15 volts. If voltage is higher, regulator is not functioning properly or connections are loose or dirty.

CAUTION

Do not leave any load switch turned on for more than 20 seconds or overheating and tester damage are possible.

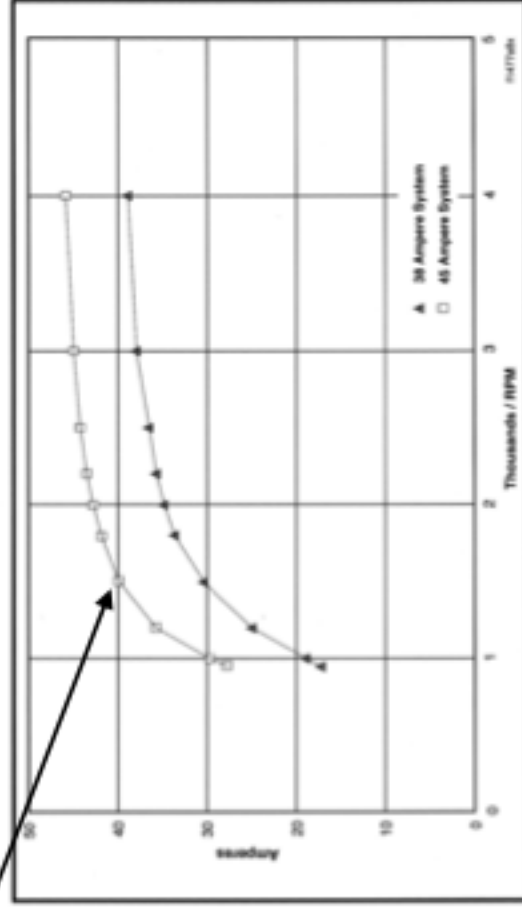


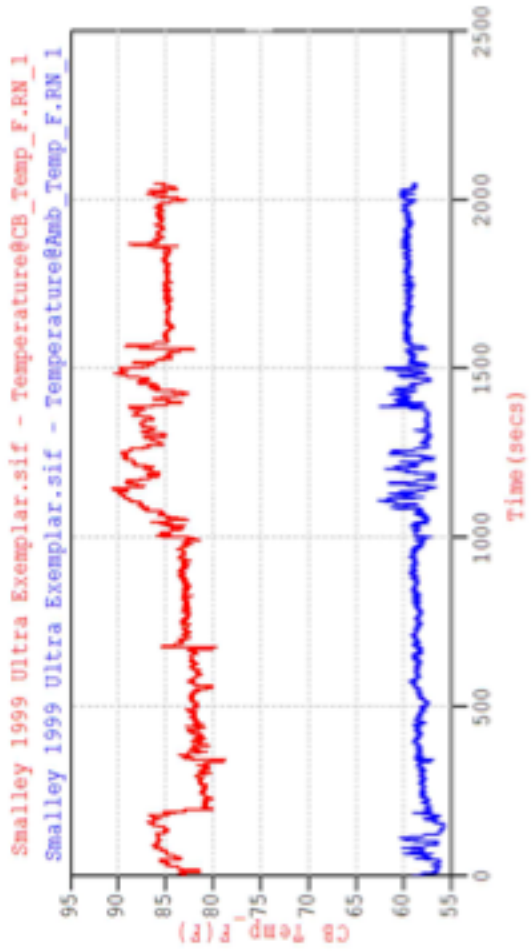
Figure 8-40. Charging System Current Output Curves

Smalley's Ultra

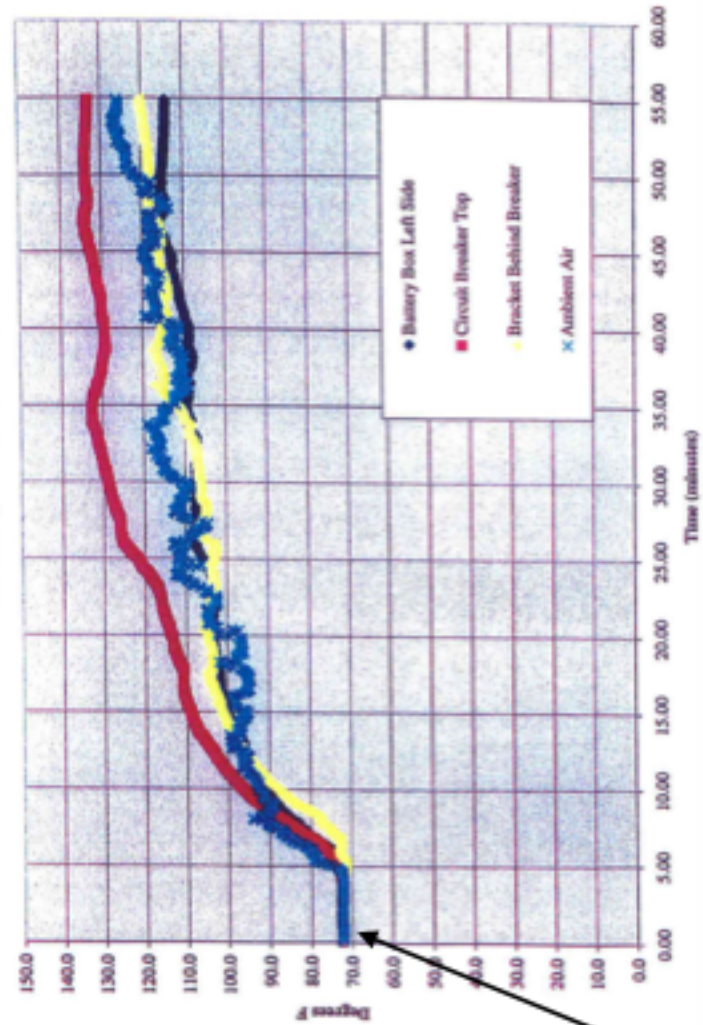
1500RMP's
40amps

AMBIENT HEAT

Mr. Hejlik Smalley Heat Graph.
Exhibit "AAA"



Harley Davidson Recall Heat Test
Exhibit "TTT"
SUBJECT TO PROTECTIVE ORDER
Temperature vs. Time
COV 17789 - data collected at TTF



Rider: Kyle Morrison
Outside Temp: 90 deg F
Date Tested: 9/5/2001
Duty Cycle: 25 miles of Interstate then 30 minutes of "stop light" traffic

Ambient Heat

SUBJECT TO PROTECTIVE ORDER

Ambient Heat

Raw Data From TTF

Data Point	Time minutes	Battery Box Left Side Deg F	Circuit Breaker Top Deg F	Bracket Behind Breaker Deg F	Ambient Air Deg F
1	0.08	72.1	72.5	72.2	72.3
2	0.17	72.0	72.5	72.2	72.3
3	0.25	72.0	72.5	72.2	72.3
4	0.33	72.1	72.5	72.4	72.4
5	0.42	72.0	72.5	72.2	72.3
6	0.50	72.0	72.5	72.2	72.4
7	0.58	72.0	72.5	72.3	72.3
8	0.67	72.1	72.5	72.3	72.3
9	0.75	72.0	72.5	72.2	72.3

Riding conditions

